

Before addressing the merits of the new Office Action, applicant notes that such Office Action refers to 37 CFR 1.193(b)(2) if reinstatement of the appeal is requested. Applicant is **not** requesting reinstatement of the appeal, but applicant respectfully notes for the record that such rule has now been replaced by 37 CFR 41.39(b). Applicant believes the option of proceeding with the Appeal at this stage does not exist because the examiner has reopened prosecution, and is accordingly proceeding under 37 CFR 1.111(a)(1). Applicant of course respectfully preserves his right to appeal any Final Rejection, should such action become necessary or desirable.

The present invention is quite simple and applicant's claims are quite limited, even though claim 1 is short in length. Thus, the following recitations are in claim 1 : (1) woven fabric; (2) awning fabric; (3) yarns are continuous filament or monofilament; (4) yarns are of polyester; (5) yarns are wet-dyed; (6) the dye is an anthraquinone-based dye; (7) the anthraquinone-based dye is a disperse dye. Applicant's claims define novel and unobvious subject matter and should be allowed, whereby applicant again respectfully requests favorable reconsideration and allowance.

Claims 1, 2, 4, 11 and 12 have been rejected as obvious under Section 103 from newly cited and applied Hermes USP 3,943,105 ("Hermes") in view of Ferrari (previously

applied) and further in view of any one of previously applied Speck, previously applied Hildreth or previously applied Shown. Applicant understands that three different rejections are applied, namely Hermes in view of Ferrari and Speck, Hermes in view of Ferrari and Hildreth, and Hermes in view of Ferrari and Shown. All three of these rejections are respectfully traversed.

Hermes is the newly cited and applied prior art, and Hermes teaches away from the present invention. Thus, while the Examiner is correct that Hermes discloses a woven polyester textile material suitable for use as a sail or awning per Example 2, Hermes says little or nothing about dyeing such woven polyester textile material, or how it is dyed or with what it is dyed. The issue is one of obviousness under Section 103.²

The crux of Hermes is the use of an ultraviolet (UV) light absorber to protect the polyester (e.g. column 3, lines 23-31), and this is applied "in a substantially non-volatile liquid polyhydric alcohol bath" at an elevated temperature. Thus, the person of ordinary skill in the art, seeking to follow Hermes, would do what Hermes says is important, namely use such a UV light absorber.

² There is no rejection under Section 102, and thus novelty is acknowledged by the PTO.

Contrary to Hermes, applicant has proceeded in a way that provides good UV stability and weather resistance (see bottom paragraph on page 1 of applicant's specification) without the necessity of doing what Hermes says is essential, although a UV block may indeed be used in the present invention and is specifically called for in claim 5. Applicant is able to obtain satisfactory results without a UV absorber as required by Hermes because of other selections not made obvious by Hermes as pointed out above.

At least in part recognizing the deficiencies of Hermes, the PTO relies on Ferrari to show that continuous filament yarn has been previously known to make awnings, Ferrari also mentioning fabric of woven polyester yarn. As understood, the rejection expresses the PTO position that because of these two teachings of Ferrari, it would therefore have been obvious to make the awning fabric of Example 2 of Hermes of continuous polyester filaments. But this ignores the requirements of Ferrari, the main feature of which is to provide a plastic coating on the fabric. Ferrari thus states that in order to combat transverse shrinkage of polyester fabrics (column 1, lines 28-33),

... there is provided a method for coating fabric ..., wherein the [fabric] is ... coated with a layer of synthetic material, heated for the purpose of gelifying or polymerising the coated material, hot-

rolled, cooled and wound-up. (Column 2,
first paragraph)

According to the illustrative examples relied upon by the PTO at the bottom of column 4 of Ferrari, the fabric is coated preferably with polyvinyl chloride resin, or alternatively with polyurethane or acrylic resin.

The person of ordinary skill in the art, with Hermes and Ferrari before him, would then be faced with the dilemma of what to do. Should that person treat with the UV light absorber as required by Hermes or coat as required by Ferrari? Or should both operations be carried out, thus substantially increasing the costs and without there being any reasonable expectation that the procedures would be compatible and a useful product would be obtained?

Applicant respectfully maintains that the person of ordinary skill in the art, considering both Ferrari and Hermes, would not obviously combine these references for fear of excess costs and incompatibility. In this regard, applicant notes that when considering references, the person of ordinary skill in the art would not ignore doing what the art requires. Thus, the person of ordinary skill in the art would not even attempt to combine these diverse references, after considering what is crucially important in each one.

Even if it were obvious to modify Hermes according to Ferrari, contrary to applicant's position as pointed out above, applicant's claim 1 would still not be reached. This is recognized by the examiner, who relies on any one of three additional citations.

The PTO position as understood is that each of these three references discloses wet-dyeing polyester with an anthraquinone-based disperse dye. Speck discloses dyeing polyester fibers with certain anthraquinone dyes, but it is unclear whether or not these are disperse dyes. Hildreth also discloses the dyeing of polyesters with anthraquinone dyes, but again it is unclear that these are disperse dyes. Lastly, Shown also discloses the dyeing of polyesters with anthraquinone dyes. However, applicant has never alleged to be the first to use anthraquinone dispersed dyes on polyesters, and thus will assume that at least one of the three tertiary references does disclose dyeing polyester with disperse anthraquinone dyes.

Thus, what the art provides are a series of unrelated features with no motivation to combine such features and certainly with no reasonable expectation of obtaining the improved results which applicant has achieved.

As pointed out in appellant's second³ main Brief (filed July 5, 2005) at page 10, there is nothing in the prior art which suggests a fabric made of substantially entirely wet-dyed polyester continuous filament yarn and/or polyester monofilament yarn which has been wet-dyed using an anthraquinone-based disperse dye. Applicant respectfully notes that it is not the selection of one feature that provides the improved results of the present invention, but instead the combination of various factors. The selection of polyester, together with the nature of the yarn (continuous filament or monofilament), together with the yarn having been wet-dyed with an anthraquinone-based disperse dye, as called for in claim 1, provide an exceptional product.

Contrary to the prior art, the fabric of the present invention does not need a coating to produce a smooth fabric as required by Ferrari, because the use of continuous filament yarn and/or monofilament yarn provides a smooth fabric. There is no motivation to combine the coated fabric of Ferrari with UV treated fabric of Hermes and then with the dyed polyesters of any of Hildreth, Speck or Shown.

As the Federal Circuit noted in *In re Dembiczak*, "Our case law makes clear that the best defense against the

³ Applicant's first Brief was filed March 2, 2004, after which the PTO abandoned its previous rejections and reopened prosecution a first time.

subtle but powerful attraction of hindsight-based obviousness analysis is rigorous application of the requirement for the showing of the teaching or motivation to combine prior art references." 175 F.3d 994,999,50 USPQ2d 1615,1617 (Fed. Cir. 1999). "To establish a *prima-facie* case of obviousness based on a combination of the content of various references, there must be some teaching, suggestion, or motivation in the prior art to make the specific combination that was made by applicant." *In re Dance*, 160 F.3d 1339,1343,48 USPQ2d 1635,1637 (Fed. Cir. 1998).

Applicant respectfully submits that the coupling together of diverse teachings from the separate and relatively diverse references as proposed in the rejection is the same type of rejection that was condemned by the Board in *Ex parte Levengood*, 28 USPQ2d 1300, 1301-1302 (BPAI 1993):

The examiner notes that each reference discloses a different aspect of the claimed process. The examiner also notes that all aspects were "well known in the art". The examiner then indicates that because the various aspects of the claimed process were individually known in the art, the modifications of the electrophoretic process of Levengood by exposing Levengood's plant materials to cell-associated materials in order to "graft" or otherwise incorporate the cell associated material into the plants was **"well within the ordinary skill of the art"** at the time the claimed invention was made".

We reverse the rejection because the examiner has used the wrong standard of obviousness. (emphasis in original)

Similar to *Levengood*, the rejection in the present invention seems to be based in part on the idea that it is proper to combine diverse elements from different references merely because it is possible to do so, but that is not the correct standard.

In order to establish a *prima facie* case of obviousness, it is necessary for the examiner to present **evidence** [footnote, including cited cases, omitted], preferably in the form of some teaching, suggestion, incentive or inference in the applied prior art, or in the form of generally available knowledge, that one having ordinary skill in the art **would have been led** to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. See, for example, *Carella v. Starlight Archery*, 804 F.2d 135, 231 USPQ 644 (Fed. Cir. 1986); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985). (emphasis in original)

In the present case, as in *Levengood*, the prior art would not have led the person of ordinary skill in the art to applicant's invention.

In this case [*Levengood*],..., the only suggestion for the examiner's combination of the isolated teachings of the applied references improperly stems from appellant's disclosure and not from the applied prior art. *In re Ehrreich*, 590 F.2d 902, 200 USPQ 504 (CCPA 1979). At best the examiner's comments regarding obviousness amount to an

assertion that one of ordinary skill in the relevant art would have been able to arrive at appellant's invention because he had the necessary skills to carry out the requisite process steps. This is an inappropriate standard for obviousness. See Orthokinetics Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1 USPQ 2d 1081 (Fed. Cir. 1986). That which is within the capabilities of one skilled in the art is not synonymous with obviousness. Ex parte Gerlach, 212 USPQ 471 (Bd. App. 1980). See also footnote 16 of Panduit Corp. v. Dennison Mfg. Co., 774 F.2d 1082, 1092, 227 USPQ 337, 343 (Fed. Cir. 1985). (underlining added)

The Board continued:

Our reviewing courts have often advised the Patent and Trademark Office that it can satisfy the burden of establishing a *prima facie* case of obviousness only by showing some objective teaching in either the prior art, or knowledge generally available to one of ordinary skill in the art, that "would lead" that individual "to combine the relevant teachings of the references." *In re Fine*, 837 F.2d 1071, 5 USPQ 2d 1596 (Fed. Cir. 1988). *In re Newell*, 891 F.2d 899, 13 USPQ 2d 1248 (Fed. Cir. 1989). Accordingly, an examiner cannot establish obviousness by locating references which describe various aspects of a patent applicant's invention without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done.

This is what the PTO has done in the present case, i.e. take diverse teachings from different references and combine them even though there is no motive or incentive in the prior art to do so.

Moreover, applicant has achieved a product that is far superior to any prior awning material, and there was no reasonable expectation that such a result could have been achieved.

Applicant respectfully notes that it is not the selection of one feature that provides the improved results of the present invention, but instead the combination of various factors. The selection of polyester, together with the nature of the yarn (continuous filament or monofilament), together with the yarn having been wet-dyed with an anthraquinone-based disperse dye, all as called for in claim 1, provide an exceptional product.

The new product according to the present invention has astonishing new properties and advantages as follows.

- The wet-dyeing of the awning fabric is completely independent from the production of the filaments so that it is possible to obtain colors as desired by the applicant for the awnings independent of the color range of the producer of the filaments, as it has been so limited in the prior art.

- The surface of the fabric is silk-like smooth.

Therefore, a very neat appearance is obtained as compared with prior art awnings and the smooth surface prevents the pollution of the awning.

- The elasticity is higher than previously known and therefore cuttings formed at the occasion of winding-up the awning are avoided.

- Tear-resistance is twice as high as with conventional awnings.

- There is a certain transparency for visual light, which leads to a friendly atmosphere whereas ultraviolet radiation is kept out.

The PTO seems to not take into account the advantages achieved according to the present invention that are well disclosed in applicant's specification and are summarized above. But by not taking into account these aspects of the present invention, the PTO is not considering applicant's invention "as a whole". Applicant believes that the law is clear that the properties and advantages of an invention may not properly be ignored. Such properties and advantages do not exist in the prior art, and cannot be assumed to inherently exist in the prior art. Applicant believes that any rejection based on Section 103 which requires a combination of at least three references is an implicit admission by the PTO that none of the references individually inherently possesses the advantages of the instant invention.

Perhaps the examiner doubts that the present invention possesses the advantages alleged. If so, there is no basis for such doubt because what an applicant states in his (or her) specification is to be accepted in the absence of evidence or good reasoning to the contrary. From *Ex parte Leonard*, 187 USPQ 122, 123-24:

...., we fail to find any suggestion from the collective teachings before us that... the combination... as claimed... [would have the results alleged]. This is a totally new and surprising beneficial result,... . Such unexpected results must, of course, be taken fully into account,... [citations omitted]... .

We should note that in so holding, we rely heavily on appellant's representations We are aware of no good reason to challenge appellant's presumptively accurate disclosure... .

From *In re Costello*, 178 USPQ 290, 92:

There is no justification for simply ignoring appellant's allegations of unexpected results.

From *Ex parte Johnson*, 40 USPQ 576:

The examiner makes no showing... [that applicant's statement is incorrect] and this tribunal is not so expert in the art as to disagree with applicant's sworn description and agree with the examiner without cause.

From *In re Andrews* 168 USPQ 360, 66:

We cannot take judicial notice of... the impossibility of what appellant asserts Accordingly, we reverse the rejection which, in our view, ignored the thrust of appellant's application in this regard.

From the concurring opinion in *Ex parte Ilgen and Michl*, 172
USPQ 316, 17:

As the main opinion notes, appellant's
specification asserts an improved result...
. The examiner erred in failing to show
cause for not giving effect to this
assertion.

It is clear that the PTO has no justification in ignoring the
advantages produced by the present invention, as they are part
of the invention "as a whole". The prior art provides no
reasonable expectation that one could obtain applicant's
results from a combination of the references.

Withdrawal of the rejection is in order and is
respectfully requested.

Claims 5 and 6 have been rejected as obvious under
Section 103 over the same references and for the same reasons
applied against claim 1, further in view of Uchida JP
06/192972 ("Uchida"). This rejection is respectfully
traversed.

Claims 5 and 6 depend from and incorporate the
subject matter of claim 4 which depends from and incorporates
the subject matter of claim 1. Uchida has not been cited to
make up for the aforementioned deficiencies of the proposed
combination applied against claims 1 and 4, and therefore the
proposed combination including Uchida would not make obvious
claims 5 and 6. In other words, Uchida does not add anything

to the combination of Hermes in view of Ferrari further in view of Speck, Hildreth or Shown.

Withdrawal of the rejection is in order and is respectfully requested.

Claim 6 has also been rejected as obvious from the same combination applied against claims 5 and 6 as discussed immediately above, further in view of Howland USP 5,565,264 ("Howland"). It is unclear to applicant why the examiner rejects claim 6 first without Howland and then with Howland. At any rate, this rejection involving a sequence of five references in combination is respectfully traversed.

Claim 6 depends from and incorporates the subject matter of claim 5 which incorporates the subject matter of claim 4, which incorporates the subject matter of claim 1. Howland does not make up for the deficiencies of the basic combination as discussed above, nor has it been cited for that purpose. Accordingly, claim 6 is patentable for the reasons given above.

It may be additionally pointed out that applicant has never claimed to be the inventor of round filaments. Applicant's invention involves a combination of features as pointed out above and previously. Taking bits and pieces from various prior art documents, when the prior art does not lead one skilled in the art to do so, as is the case here, would

not have been obvious. Moreover, also as pointed out above, applicant's invention "as a whole" involves the improvements achieved of which there was "no reasonable expectation" from a consideration of the references.

Withdrawal of the rejection is in order and is respectfully requested.

Claim 12 has been rejected as obvious from the basic combination as discussed above, further in view of Curtis et al USP 4,719,954 ("Curtis"). This rejection is respectfully traversed.

Curtis does not make up for the deficiencies of the basic combination discussed above, nor has it been cited to do so. Claim 12 incorporates the subject matter of claim 11 which in turn incorporates the subject matter of claim 1, and claim 12 is therefore patentable for the reasons pointed out above.

Withdrawal of the rejection is in order and is respectfully requested.

Claim 13 has been rejected as obvious under Section 103 from the same combination applied against claim 6. This rejection is respectfully traversed.

Claim 13 is an independent claim. It calls for all the features that are called for in claim 1, and is patentable

for the same reasons as claim 1 as pointed out above, which reasons are respectfully repeated by reference. Howland does not make up for the deficiencies of the proposed basic combination applied against claim 1.

Claim 13 recites an awning fabric having a number of particular characteristics. The applicant, who is an expert in this art, believes that no awning fabric having the features of claim 13 has ever been produced. Such features are certainly not disclosed in the references cited. Applicant respectfully notes that conventional awning fabrics usually have a weft density of 30 warp threads/cm and 15 weft threads/cm which results in a weight unit area of 300 g/m² or greater. Applicant's awning fabric as called for in claim 13 is denser in the number of threads than is conventional in awning fabrics, and still weighs less (as does the fabric of claim 2), i.e. the awning fabric of claim 13 is very dense, but flatter and lighter than what is conventional. This is simply not shown or made obvious in the prior art.

The rejection states that Howland discloses a sail fabric having the claimed filament density, but applicant does not see that this is so. Moreover, even if the examiner's analysis were correct, one having ordinary skill in applicant's art with knowledge of Hermes, Ferrari, etc. would not be guided by Howland because Howland "relates to a

protective fabric having a high resistance to penetration by instruments such as ice picks and the like, and to vestments made from such fabric" (first paragraph at the top of column 1 of Howland).

A high-density fabric as disclosed by Howland is clearly more expensive than a less dense fabric. Such a fabric is needed in Howland for the intended use, i.e. protection. This provides no teaching to one interested in making an awning fabric. The teachings of Howland would be dismissed as simply increasing costs without any apparent benefit. Indeed, the fabric would be expected to be heavier, a disadvantage, whereas applicant's fabric is lighter in spite of being denser.

Applicant respectfully notes that the burden is initially on the PTO to establish a *prima facie* case of obviousness. With respect, it is not sufficient for the PTO to simply take the position that it would have been an obvious modification to alter the weaving properties of the fabric when there is no evidence whatsoever in support of such a conclusion.

Withdrawal of the rejection is in order and is respectfully requested.

Claim 14 has been rejected as obvious under Section 103 for the same reasons applied against claim 13, further in view of Uchida.

Claim 14 depends from and incorporates the subject matter of claim 13. Uchida does not make up for the deficiencies pointed out above with respect to claim 13, and has not been cited for that purpose. Accordingly, claim 14 is patentable at least for the same reasons as claim 13, as pointed out above.

Withdrawal of the rejection is in order and is respectfully requested.

Claim 13 has been rejected as obvious under Section 103 from the same combination as applied against claim 13 as discussed above, further in view of Delker, i.e. a series of 5 references in combination, including Howland. Claim 13 has also been separately rejected as obvious from the same combination applied against claim 1, further in view of Land. And claim 13 has also been rejected as obvious from the same combination applied against claim 1 further in view of both Land and Delker. These cumulative rejections are respectfully traversed.

None of the subsidiary references make up for the deficiencies of the primary combination of Hermes in view of Ferrari and any one of Speck, Hildreth and Shown, and

therefore claim 13 is patentable for the same reasons as claim 1.

It has been pointed out above that Howland has an objective which, considered by the person of ordinary skill in the art, would have caused Howland to be disregarded in view of the perceived additional costs and added weight without any perceived benefit for an awning fabric.

Delker is at best irrelevant, and actually teaches away from the present invention. As pointed out in applicant's second brief, Delker discloses high strength cores-sheath monofilaments comprising a core of thermoplastic polyester and a sheath of a different thermoplastic polyester. There is nothing in Delker which relates to the features of applicant's fabric, nor is there any teaching that would lead one to the features of applicant's fabric which no prior art shows, namely the claimed warp rate and weft density, or the weight of the fabric. Additionally, the strong teaching of Delker to use a core and sheath of different material has no relevance to the present invention and would merely increase the cost without any perceived benefit. The person of ordinary skill in the art would never do so, and therefore would not follow Delker to modify Hermes.

As regards the rejections employing Land, the Office Action states that Land provides a tight weave as claimed.

But even if this were so, it would be irrelevant because Land is directed to making a fire resistant product comprising flame resistant multi-corespun yarns incorporating fiber glass. Any one following Land would of course employ what Land teaches as essential, and this is contrary to the present invention which uses a continuous filament yarn and/or a monofilament yarn of polyester. Land is antithetical to the present invention, and its adoption (incorporation into Hermes) would result in a product quite different from what is claimed.

Withdrawal of these rejections is in order and is respectfully requested.

The Office Action also contains a series of obviousness rejections of claim 14, each corresponding to a rejection of claim 13 to which is added still another citation. These rejections are respectfully traversed.

As noted above, claim 14 depends from and incorporates the subject matter of claim 13. The additional subsidiary references do not make for the deficiencies pointed out above, and have not been cited for that purpose. Therefore, claim 14 is patentable for at least the same reasons as claim 13, as pointed out above.

Withdrawal of these rejections is in order and is respectfully requested.

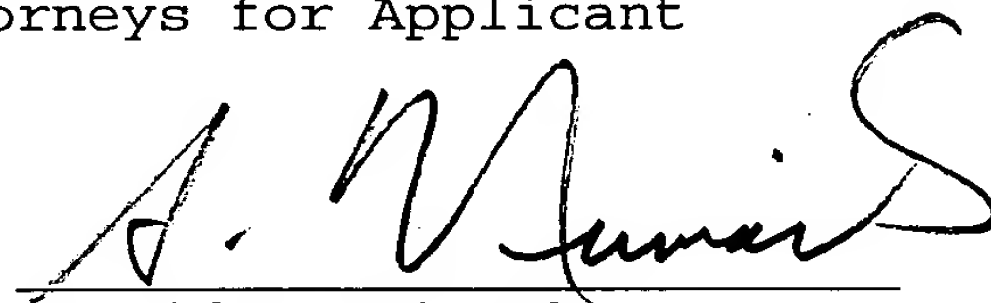
The prior art documents cited but not applied by the PTO have been noted, along with the implication that such documents are deemed by the PTO to be insufficiently material to warrant their application against any of applicant's claims.

Applicant believes that all issues raised in the Official Action have been addressed above in a manner that should lead to patentability of applicant's claims. Accordingly, applicant respectfully requests favorable reconsideration and allowance.

Respectfully submitted,

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